REMARKS

Claims 1, 4, 5, and 7-25 were previously pending in the application. Upon entry of the present amendment, claims 1, 4, 5, 7-10, 12-21, and 23-25 will be pending in the application.

Claims 1, 10, and 23 have been amended in accordance with the requirements of U.S. patent practice. Claims 11 and 22 have been canceled. The amendments are merely intended to remove redundancies and no new issues are presented. Thus, the amendments merely clarify the claims and reduce issues for appeal. Support for the amendments can be found in the original claims.

Amendments to, cancellation of, and additions to, the claims, as set forth above, are made in order to streamline prosecution in this case by limiting examination and argument to certain claimed embodiments that presently are considered to be of immediate commercial significance. Amendment or cancellation of the claims is not in any manner intended to, and should not be construed to, waive Applicants' right in the future to seek such unamended or cancelled subject matter, or similar matter (whether in equivalent, broader, or narrower form) in the present application, and any continuation, divisional, continuation-in-part, RCE, or any other application claiming priority to or through the present application, nor in any manner to indicate an intention, expressed or implied, to surrender any equivalent to the claims as pending after such amendments or cancellations.

Reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

1. Rejection of claims 1-25 [sic.] under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for GH-X 527, does not reasonably provide enablement for the protective sheet and the ranges claimed for the physical characteristics in Claim 1.

The Office Action states that the specification, while being enabling for GH-X 527, does not reasonably provide enablement for the protective sheet and the ranges claimed for the physical characteristics in claim 1. (02/03/2010 Office Action page 2, last paragraph.) The Office Action states:

> The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Applicant's specification fails to enable one having the ordinary skill in the art to make and use the protective sheet(s) claimed in claims 1-22…
>
> It is examiner's position that the claims as written are not enabled by the accompanying disclosure. As applicant has only given one example of said protective sheet as stated in Table 1. The only example is identified only by the trademark name of GHX-527 and there is no disclosure drawn to the ingredients of this material.
>
> …In claim 1, applicant recites a feature of the invention that is critical to the invention performing its intended operation. This feature is the use of a protective sheet when molding a multi-functional polymer molding…Applicant has claimed this protective sheet by claiming only the key properties of the resultant protective sheet. The process for making such a protective sheet is missing from applicant's disclosure. One of ordinary skill in the art at the time of the invention would have to run a wide spectrum of experiments in order to create a protective sheet with the 5 key properties claimed by applicant.

(02/03/2010 Office Action page 2, last paragraph, to page 4, para. 2.)

Applicants thank the Examiner for a thorough explanation of the alleged grounds of rejection. Applicants respectfully submit, however, that the specification is enabling and that the arguments in the rejection are incorrect both on the facts and as a matter of law. Applicants will first address the error on the facts of the case.

Contrary to the arguments in the Office Action, Applicants are not claiming a product on the basis of a trademark. There are no trademarks in the claims, and the use of a trademarked product in an example in the specification is actually consistent with a full disclosure and the best mode requirement. In other words, Applicants respectfully submit that Applicants' identification, in an example, of the source of a material used in the presently claimed process does not constitute non-enablement.

Furthermore, the Office Action is mistaken in stating that the material used for the film is described only in terms of trademark and properties. In fact, the material is described in detail in terms of composition. Clearly, the material used in the examples is one and the same as the preferred material described in the specification. For the Office to suggest otherwise is groundless speculation, contrary to the plain meaning of Applicant's disclosure. To clarify this point, Applicant has amended the specification to state that the protective sheet GH-X 527 from

Bischof+Klein, Lengerich is a polypropylene protective film with an outer side having antiblocking properties and its side for coating having adhesive properties. This is inherent in the original disclosure as supported, for example, by US Patent Publ. No. 2009/0011189 A1, page 8, para. 0208, and US Patent Publ. No. 2009/0061215 A1, page 17, para. 0271.

The Office Action is also incorrect in asserting that a wide spectrum of experiments would be required to create a protective sheet with the five key claimed properties. In fact, only three properties are required by the claim, which are storage modulus, elongation to break, and transmittance. Furthermore, it would be incredible to believe that one of ordinary skill could not obtain a sheet that transmits visible light and UV radiation. Hence, the remaining requirements are storage modulus and elongation to break. One of ordinary skill in the art would appreciate that it would not be especially difficult to obtain a sheet with such types of specified properties. More significantly, Applicants submit that such specified properties are typical standard types of requirements in purchasing such films from various companies specializing in their production and sale, as described in the present specification.

Furthermore, Applicants respectfully submit that the claimed ranges for storage modulus and elongation to break are not indefinite or unduly broad. In fact, as suggested by the Examiner in the previous rejection, Applicants amended the claims to recite that the protective sheet has a storage modulus E' of from 10^7 to 10^8 Pa in the temperature range from room temperature to 100°C, and an elongation at break of from 400 to 900% at 23°C. Thus, the ranges in the claims reasonably, in fact quite closely, match the properties of the representative material used in the example.

Furthermore, Applicants strongly contend that the example on pages 19-21 of the originally filed application is fully enabling. The fact that only one example of the invention is provided in the application is irrelevant to the enablement requirement. The kind of protective sheet used in the example is available from a variety of commercial sources and can be readily obtained based on the stated specifications once the essential properties and polymer composition have been selected for use in the specified process and final use in high gloss automobile moldings. Other commercial sources for such protective sheets, among others, are illustrated, for example, by the assignees of EP 1767341 A1 to Grefenstein et al. and WO 2008/005110 to McGee et al., which references also illustrate the common practice of claiming polymer films in terms of key properties. One of ordinary skill in the art would appreciate that,

given all the details provided in the application with respect to the specific protective sheet, including properties, structure, and composition, one of ordinary skill in the art could obtain such a sheet meeting the specified requirements from a variety of commercial suppliers.

Thus, claim 1 does not describe the protective sheet in terms of a trademark or only in terms of properties, but clearly recites that the protective sheet comprises a film made of polyethylene, polypropylene, ethylene copolymers, propylene copolymers, and ethylene-propylene copolymers. Still furthermore, claim 23 recites that the protective sheet is constructed from a plurality of layers comprising at least one core layer (KNS) and at least one further layer selected from the group consisting of adhesive layers (KS) and antiblocking layers (AS).

It is also important to note that Applicants are not claiming a method of making a protective sheet, but rather the selection, from the broad genus of all possible or conceivable protective sheets for whatever use in whatever process, of a species of a specific type of protective sheet for use in a specific type of process for making a specific type of product, as discussed more fully below with respect to the obviousness rejection. Applicants have provided a specific trademark and accompanying generic information, including key properties, such that the protective sheet is well defined and obtainable from a commercial supplier. The additional trademark identification is consistent, not inconsistent, with Applicants' disclosure requirements.

2. Rejection of claims 1, 4-5, 7-8, 12-21 under 35 U.S.C. 103(a) as being unpatentable over Koniger et al. (WIPO International Publication WO 00/63015, made of record by the applicant, whose English equivalent is Koniger et al. (USP No. 6,777,089 B1).

The Office Action states:

> In claim 1, Koniger teaches a process for producing polymer moldings (M/T/B) with functional surfaces (O) for which (I) a coating (B) is produced on a thermoplastic support sheet (T) by a process comprising (1.1) coating one surface (T.1) of (T) with at least one pigmented coating material (B.1). (See column 4, line 45, to column 5, line 45, disclosing the addition of a coloring layer (pigment) to the substrate (support sheet) and (1.2) coating the resulting film (B.1) with at least one chemically curable coating material (B.2). (See column 4, line 45, to column 5, line 45, disclosing the addition of an outer layer which is radiation curable. Also see column 1, lines 50-67, disclosing the addition of an outer laver that is radiation curable) to give the film (B.2) following its curing a transparent coating (B.2). (See Column 5, lines 32-35, disclosing that the outer layer is transparent.), (II) inserting the resulting coated thermoplastic support sheet (I/B) into an open mold, (III) closing the mold and contacting the uncoated side (T.2) of the coated thermoplastic support sheet (I/B) with a liquid polymeric material (M) to shape the

> coated thermoplastic support sheet (T/B) and join it firmly to the polymeric material (M), and causing the polymeric material (M) to solidify. (See claim 11 and column 6, lines 61-67, disclosing the injection-back molding of a polymer composition to the substrate sheet), and (IV) removing from the mold (Inherently the sheet is removed from the mold after the addition of the polymer back molding), the resulting coated polymer molding (M/T/B), whose coating (B) is uncured, part-cured or full-cured; where (V) fully curing in or after at least one of step (I) step (III) or step (IV) the uncured or part-cured coating (B) or after step (IV) the full-cured coating (B) is after cured; the coating (B) being covered at least temporarily with a protective sheet (S). (See column 5, lines 33-38, disclosing covering the sheet with a protective layer. This protective sheet allows the curing process to be delayed.)

(02/03/2010 Office Action page 6, last paragraph, to page 7, para. 1.)

This rejection is respectfully traversed. Koniger simply does not teach the present invention, namely the use of the specified process and/or specified film material, more specifically the combination of the two to obtain a high gloss film for use in an automobile or the like. Thus, Koniger fails on both counts, specified process and specified material used in the specified process. The result of the claimed process is a high gloss material capable of meeting the stringent requirements for automobile moldings.

The Office Action is merely presuming teachings based on Applicants' own disclosure and ignoring the critical differences in the prior art. This is impermissible under 35 U.S.C. §103. Claim limitations cannot be overlooked, nor the invention as a whole treated only in part.

The Office Action concedes that Koniger does not teach fully or partly curing the film B2 after Step (1) but before Step (2) nor the use of a protective sheet S1 having the essential storage modulus and elongation to break properties.

Thus, the Office Action essentially admits that the prior art does not teach the present invention. What the Office Action appears to attempt to do is to overlook those critical deficiencies with a series of incompatible and inconsistent assertions. For example, the Office Action asserts, on the one hand, that there "are endless numbers of materials which are polyolefin based with infinite combinations of physical characteristics," and, on the other hand, that "the claimed protective sheet can be selected from the group of films…the protective sheets for inventive use are conventional…Essentially, applicant has disclosed the use of a well known conventional plastic as a protective sheet." In other words, the Office Action ignores the inventiveness, i.e., the selection to obtain improved results, and replaces it with an incorrect standard of obviousness according to which any material for any use in any process is obvious so

long as the pieces can be found somewhere in the prior art. Ironically, as indicated before, this misapplication of the 35 U.S.C. §103 is logically inconsistent with the non-enablement rejection, which points to the "myriad" of possible films and properties.

Furthermore, the Office Action has misconstrued the claimed invention by viewing the invention as claiming a protective sheet, whereas the invention is claiming a process for making a molding in which the sheet is used to make a multilayered article having high gloss for use in automobiles or similar transport vehicles. Thus, the relationship between the process and materials used in the properties are important.

In particular, the Office Action has not addressed Applicants' arguments with respect to Koniger's prior art process. Applicants has previously pointed out that Koniger, in fact, does not disclose Applicants' process. Koniger teaches: "The radiation curing of the outer layer takes place in this case preferably after the thermoforming operation and with particular preference after the injection backmolding of the film." Similarly in the Examples, in col. 8, Koniger cures the radiation curable film after thermoforming, as indicated in col. 8, lines 28-32, and again, in col. 8, lines 57-60.

In contrast, claim 1 recites that "the film (B.2) is fully or partly cured with UV radiation after step (I), but before step (II), following deformation to adapt the coated thermoplastic support sheet (T/B) to the contour of the mold, wherein the resulting full-cured coating (B.2) is optionally after-cured after step (IV) or the resulting part-cured coating (B.2) is fully cured after step (IV), and the resulting polymer molding (M/T/B) is optionally thermally after-treated to raise the crosslink density of (B.2)," as supported by the original specification on page 13, lines 21-29.

Further distinguishing from the process of Koniger, present Claim 24 recites that the film (B-2) is partly cured with UV radiation after step (I), but before step (II), following deformation to adapt the coated thermoplastic support sheet (T/B) to the contour of the mold, the resulting part-cured coating (B.2) is fully cured after step (IV), and the resulting polymer molding (MTB) is optionally thermally after-treated to raise the crosslink density of (B.2). Further still, Claim 25 recites that the film (B-2) is fully cured with UV radiation after step (I), but before step (II), following deformation to adapt the coated thermoplastic support sheet (T/B) to the contour of the mold, wherein the resulting full-cured coating (B.2) is after-cured after step (IV), and the

resulting polymer molding (MTB) is optionally thermally after-treated to raise the crosslink density of a (B.2).

The Office Action states:

> With respect to claim 1, Koniger does not teach… wherein the protective sheet (S) has (s.1) a storage modulus E' of at least 10^7 Pa in the temperature range from room temperature to 100°C, (s.2) an elongation at break from 400-900% at 23°C longitudinally and transversely to the preferential direction produced by means of directed production processes in the production of (S), (s.3) a transmittance >70% for UV radiation and visible light with a wavelength of from 230 to 600 nm for a film thickness of 50 micrometers and wherein the coating (B)-facing side (S.1) of the protective sheet (S) has (s.1.1) a hardness <0.06 GPa at 23°C and (s.1.2) a roughness corresponding to an R_a from 50 micrometers^2 <30 nm as determined by means of atomic force microscopy (AFM).
>
> …applicant states that the claimed protective sheet can be selected from the group of films consisting of polyethylene. polypropylene, ethylene copolymer, propylene copolymers, and ethylene-propylene copolymers (See applicant's specification-page 16, lines 10-14). Furthermore, applicant has stated that "the protective sheets for inventive use are conventional." (See page 17, line 9). Essentially, applicant has disclosed the use of a well-known conventional plastic as a protective sheet. Koniger also discloses the use of a polyethylene protective sheet. Therefore, it would have been obvious to one having the ordinary skill in the art to select a known protective film such as GH-X 527 for the benefit of using the film as a releasable protective sheet that can be removed from a polymer molding.
>
> …Additionally, Schoeppel further teaches that the GH-X series releasable protective sheet are known in the art to be used in application in which a protective sheet can be applied and removed at a subsequent time period. (See paragraph 0132 and 0078.)
>
> It would have been obvious to one having the ordinary skill in the art to alter the teachings of Koniger to include the teachings of Schoeppel, since it is well known in the art that GHX series protective sheets are useable as protective films and are among those films that one having the ordinary skill in the art would look to in finding the most effective protective sheet.

(02/03/2010 Office Action page 8 para. 2, to page 10, para. 2.)

Applicants note that Koniger generally discloses a radiation-curable composite layered sheet or film comprising an outer layer, which is a radiation curable composition having a glass transition temperature of more than 40°C; an optional thermoplastic interlayer; an optional coloring layer; a substrate layer; and an optional adhesive layer (Abstract and col. 5, lines 20-31). Applied to the transparent outer layer there may be a protective layer, e.g., a removable film,

which prevents unintended curing (col. 5, lines 32-38). The protective layer may be composed of polyethylene or polyterephthalate (col. 5, lines 35-38).

As indicated above, Koniger does not use the protective sheet in the same process as presently claimed. Applicants at least partly cure the clearcoat film B.2 before the injection molding operation. With respect to the protective sheet used in the present process, the specified storage modulus, elongation at break, transmittance of UV radiation and visible light, hardness, and roughness, in simultaneous combination, are "essential" to the inventive process, as explained in the application, for the claimed use of the protective sheet in making polymer moldings for means of transportation, including (claim 23) exterior mounted components for automobile bodies.

Thus, Koniger does not teach that the protective sheet imparts to the coating (B)-facing side (S.1) of the protective sheet (S) (s.1.1) a hardness <0.06 GPa at 23°C and (s.1.2) a roughness corresponding to an Ra value over a sampling area of 50 μm2 of <30 nm as determined by means of atomic force microscopy (AFM), as well as the specified (more narrowly amended) elongation at break and storage modulus.

More specifically, claim 23 and claim 22 require (s.1) a storage modulus E' of at least 10^7 to 10^8 Pa in the temperature range from room temperature to 100°C, (s.2) an elongation at break of 400 to 900% at 23°C longitudinally and transversely to the preferential direction produced by means of directed production processes in the production of (S), (s.3) a transmittance >70% for UV radiation and visible light with a wavelength of from 230 to 600 nm for a path length of 50 μm; where one surface of the sheet has (s.1.1) a hardness <0.02 GPa at 23° C, and (s.1.2) a roughness corresponding to an Ra over a sampling area of 50 μm2 of <25 nm as determined by means of atomic force microscopy (AFM). **These essential limitations of the protective sheet cannot be found anywhere in Koniger**.

Regarding the non-obvious selection of the protective sheet used in the process of claim 1, the skilled person in the art is aware that polyethylene and related polymers encompass a vast array of chemical and physical property possibilities. Polymers that differ in copolymer composition, ratio of comonomers, average molecular weight, molecular weight distribution, glass transition temperature, degree of crystallinity, degree of crosslinking, and type and number of polymer additives present are possible and are well known in the art. These factors will affect storage modulus, elongation at break, and transparency of films made from polyethylene and

related polymers. Those of skill in the art thus readily appreciate that the properties required in Applicants' claim 1 are not present in all polyethylene or related polymer sheets used for a protective purpose in various contexts. In fact, the non-obviousness of the present selection is underscored by the Office Action, which stated, "[I]t is well known that there are endless numbers of materials which are polyolefin based with infinite combinations of physical characteristics." (7/10/2009 Office Action page 6, lines 1-2). In fact, there are a wide variety of protective films that can be obtained for a wide variety of processes and products for various purposes.

The disclosure of the protective layer of Koniger is at best a broad invitation to investigate films made of ethylene or polyethylene terephthalate. Yet, what would be investigated? According to Koniger, the films are merely used to protect the coatings (B), something achievable with many different and diverse coatings, even polyterephthalate films. In contrast, Applicants have found a specific type of protective film that, in a specific process, produces results in terms of gloss and other desired qualities, which protective film and results are not remotely taught by Koniger. For example, polyethylene or polyethylene terephthalate films can have a surface roughness outside of the claimed range, but the applicants have found that roughness as determined by AFM that corresponds to an Ra value over a 50 mm^2 sampling area of <30 nm is ideal for producing coatings (B) with the desired properties.

The present specification states: The polymer moldings (M/T/B) with the functional surfaces (O) have outstanding surface properties. Their functional surfaces (O) have outstanding leveling, outstanding distinctiveness of the reflected image (DOI), and very good gloss…This applied even in those cases where the product of step (I) has been stored for a relatively long time before step (II) is carried out….Since they [the polymer moldings (M/T/B)] have what is termed automotive quality…they possess in particular outstanding suitability as exterior mounted components for automobile bodies, especially for top class automobile bodies." [Page 18, lines 14-21, and page 19, lines 1-5.] As stated in the present specification, Applicants have compared the results of the claimed process to the moldings obtained using the processes of WO 00/63015 A1 [Koniger] and EP 0 352 298 B1, which in comparison were found to have inadequate gloss. Application as filed, page 2, lines 11-27.

Specifically, the outstanding properties obtained by the present process are nowhere taught or even sought by Koniger. Applicants have shown that the polymer moldings of Koniger do not possess the desired properties:

> [T]he coating (B) being covered at least temporarily with a protective sheet (S) is known from [Koniger]...The process, however gives polymer moldings (M/T/B) having unsatisfactory surface properties. In particular the functional surfaces (O) have inadequate leveling, an inadequate distinctiveness of the reflected image (DOI) and/or inadequate gloss. This applies in particular to those cases where it was necessary to store the process of step (I) for a relatively long time....[Page 2, lines 11-21.]

Thus, the present invention solved the problem found in the prior art represented by Koniger. As stated in the specification, the invention was surprising and unforeseeable for the skilled worker in light of the prior art. (Page 5, lines 21-25.) Thus, the assertion by the Office that Koniger teaches the presently claimed invention is contrary to the facts, whereas ignoring the differences from the prior art incorrectly applies the law under 35 U.S.C. §103.

Koniger cannot be used, under 35 U.S.C. §103, as an invitation to investigate in order to obtain Applicants' molding process, based on hindsight. MPEP §2112 IV states "'[a]n invitation to investigate is not an inherent disclosure' where a prior art reference 'discloses no more than a broad genus of potential applications of its discoveries.' *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004) (explaining that '[a] prior art reference that discloses a genus still does not inherently disclose all species within that broad category' but must be examined to see if a disclosure of the claimed species has been made or whether the prior art reference merely invites further experimentation to find the species

Although Koniger states that the protective layer of Koniger may be composed of polyethylene or polyterephthalate, there is no teaching of the protective sheet in terms of composition, structure, and key properties, such as could be selected from a wide variety of possible polymer films. For example, the use of fillers or other additives could significantly affect the properties. There is no teaching in Koniger of any specific commercially available protective film. Therefore, there is no basis for the allegation that the protective films of Koniger, which are not fully described, teach the chemical composition and structure of the specifically selected protective sheets of Applicants' claim 1.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations

(*CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003); In re Royka, 490 F.2nd 981, 985 (C.C.P.A. 1974)). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings (*DyStar Textilfarben GmbH & Co. Duetschland KG v. C.H. Patrick Co.*, 464 R.3d 1356, 1360, 80, USPQ2nd 1641, 1645 (Fed. Cir. 2006), (MPEP 2143 G). Third, there must be a reasonable expectation of success *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986), (MPEP 2143.02).

Koniger does not teach all the essential elements of the process of independent claim 1. Specifically, Koniger does not teach that the protective layer has the specified storage modulus E', elongation at break, transmittance, nor that the protective sheet has, on one side thereof, the specified hardness and roughness. Second, as pointed out above, these physical property limitations for the protective sheet of claim 1 are not obvious. Third, the prior art does not teach the unexpected advantages of the present invention, as discussed above. Obviousness cannot be predicated on what is unknown. *In re Shetty*, 566 F.2d 81, 86, 195 U.S.P.Q. 753, 756-57 (C.C.P.A. 1977). Koniger merely teaches that the use of the protective sheet is to prevent unintended curing. (Col. 5, lines 33-38.) The protective film (S) disclosed in claim 1 of the present application is not capable of preventing unintended curing, since the protective films of claim 1 have a transmittance of >70% of UV radiation and visible light with a wavelength of from 230 to 600 nm for a film thickness of 50 mm. The skilled person in the art would recognize that such a protective film could allow sufficient UV and visible light to penetrate the film to cure the coating. Fifth, Koniger teaches the use of the protective film in a different process, involving a different curing sequence.

The Supreme Court has recently reaffirmed the principle that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the art". *KSR Int'l. Co. v. Teleflex Inc.,* 127 S.Ct. 1727, 1741 (2007). Furthermore, while the KSR decision may have eliminated any rigid requirement for application of the teaching-suggestion-motivation test (TSM test), it did not disturb the longstanding principle that "a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock*, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)."

Therefore reconsideration and removal of the obviousness rejection of the claims over Koniger is respectfully requested.

3. **Rejection of claims 9-11 and 22-25 under 35 U.S.C. 103(a) as being unpatentable over Koniger et al. (U.S. Patent No. WIPO International Publication WO 00/63015, made of record by the applicant, whose English equivalent is Koniger et al. (USP No. 6,777,089 B1) in view of Schoeppel (U.S. pre-grant publication 2004/0042379 A1) and in further view of Otaki et al. (U.S. Patent No. 6,509,076), hereafter "Otaki.".**

Koniger is discussed above. Schoeppel is directed to an optical storage medium from which information can be read out and/or into which information can be recorded with a light beam. Abstract. The optical storage film is characterized by an over film exhibiting a vertical birefringence of less than 0.0001 at 20°C at the wavelength of the light beam. Schoeppel, col. 11, claim 1.

Schoeppel was cited in the rejection for disclosing that GH-X series releasable protective sheets are known in the art. It is respectfully submitted that Schoeppel cannot correct the deficiencies of Koniger discussed above. The presently claimed molding process is not remotely disclosed by Schoeppel. The fact that the a GH-X series sheet can be used as a protective sheet in general irrespective of the process, for radically different uses, having no apparent relation to high gloss or automobiles, falls far short of the present invention.

The other secondary reference, to Otaki, generally discloses a pressure-sensitive adhesive for a pressure-sensitive adhesive layer in a volume hologram laminate which, when kept in the pressed state, for example, during storage, is less likely to cause spotty hologram defects in the volume hologram layer. The volume hologram laminate comprises a substrate, and stacked on the substrate in the following order, a first pressure-sensitive adhesive layer, a volume hologram layer, a second pressure-sensitive adhesive layer, and a surface protective film. The second pressure-sensitive adhesive layer comprises an acrylic copolymer resin, composed mainly of an alkyl acrylate and a crosslinking agent, and has a dynamic storage modulus of not less than 2.5 x 10^5 Pa and a loss tangent (tan d) of not more than 0.15. The Office Action alleges:

> In claim 9, Koniger does not explicitly teach wherein the protective sheet (S) is constructed from a plurality of layers…However, Otaki discloses wherein the protective sheet (S) is constructed from a plurality of layers. (See column 10, line 36, to column 11, line 30, disclosing example 1 which discloses that the protective film (part number 6 in

> figure 1) has multiple layers. More specifically the protective film has an adhesive layer and a release layer (antiblocking layer).)
>
> Koniger and Otaki are analogous art because they solve the similar problem of protecting a laminate sheet from post processing harm by adding a protective sheet to the outer layer. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Koniger and Otaki before him or her, to modify the teachings of Koniger to include the teachings of Otaki for the benefit of creating a protective layer that is capable of bonding to the outer layer of the laminate sheet any preventing any unwanted curing/damage on the outer surface. (See Column 1, lines 25-30, disclosing that the multi layer laminate (hologram) has many defects when they are stacked or pressed on top of one another during storage.) The motivation for doing so would have been to delay the defects by adding a protective layer that comes off prior to use. Therefore, it would have been obvious to combine Koniger and Otaki to make a polymer molding whose final product can be delayed until after the protective film was taken off because one would have been motivated to solve the problem of eliminating defects in the resultant product.

(02/03/2010 Office Action page 15, last paragraph, to page 16, para. 1.)

Applicants appreciate the detailed basis of rejection of claim 9, but respectfully traverses this rejection as well. In the "Background Art" section (col. 1, ll. 14-18), Otaki states that the prior art holograms laminates also have a "transparent protective film" (line 19). Yet the prior art volume hologram laminates still "pose a problem of the occurrence of spotty hologram defects" (col. 1, ll. 26-30). Thus, as stated in the "Disclosure of the Invention" section, Otaki teaches that "it is an object of the present invention to provide a pressure-sensitive adhesive for a pressure-sensitive adhesive layer in a volume hologram laminate which . . . is less likely to cause spotty hologram defects in the volume hologram layer" (col. 1, ll. 41-48). Thus the teaching of Otaki is an adhesive of specific composition and elastic properties which solves the problem of spotty defects. The motivation of Otaki is to modify the elastic properties of an adhesive layer, if present, rather than to provide a protective sheet layer as presently claimed for the specified process to make the specified product, which product is not a hologram laminate. Thus, Otaki cannot reasonably correct the deficiencies of Koniger discussed above.

Regarding claims 10 and 11, the Office Action alleges that Otaki discloses that the protective film has a core layer, an adhesive layer, and a release layer, and the protective film can comprises polyethylene among other polymers. The Office Action alleges that Otaki provides motivation to use a protective layer in order to eliminate defects. As stated above, it is the teaching of Otaki that an adhesive of specific composition and elastic properties solves the

problem of spotty defects, not the presence of a specific protective film as presently claimed for use in a specific process to make a specific type of polymer molding, as presently claimed.

Taken as a whole, it is respectfully submitted that Otaki fails to correct the deficiencies of Koniger or to provide the requisite motivation to modify Koniger to obtain the presently claimed process, even when optionally taken in view of Schoeppel. In addition, claims 9-10 (directly) and claim 11 (indirectly) depend from claim 1, and incorporate all the limitations of claim 1, which is not obvious over Koniger as discussed above. Reconsideration and removal of the obviousness rejection of claims 9-11 is therefore respectfully requested.

Response to Arguments

The Office Action incorrectly states, in the "Response to Arguments" section, that Applicants argue that supplying the trademark GH-X 527 and its properties is enough to enable the invention. This is an incorrect interpretation of Applicants' arguments. As indicated above, claim 1 specifically includes the composition of the polymers used in the protective sheet, on the basis of which the storage modulus and elongation to break can be obtained for use in the specified molding process.

Applicants have defined the claim in terms of both particular types of polymers and a specified set of standard properties. The Examiner's repeated assertions that Applicants are claiming based only on a trademark, which is nowhere present in the claims, is incorrect. The fact that Applicants' have obtained a material from a commercial source or have additionally identified the material by trademark, in an example, is standard practice, contrary to misinterpretations or exaggerations in the Office Action. In fact, the trademarked product used in the examples is the same material as described in the present specification in terms of polymeric composition. There is nothing exotic about the polyolefin materials claimed or their properties. The selection of the materials and properties for use in the presently claimed process is indeed nonobvious, given the myriad possible films available or conceivable. Once those materials and properties are selected, however, then obtaining the specified film is well within standard practice by one of ordinary skill in the art.

CONCLUSION

Applicants respectfully submit that the Application and pending claims are patentable in view of the foregoing remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,

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